

CLAIMS

5 1. A plant-cultivating device having a shape capable of receiving a plant body to be cultivated; the device comprising, as at least a portion thereof, a film capable of being substantially integrated with the root of the plant body.

10 2. A plant-cultivating device according to claim 1, wherein the film is one showing a difference in the electric conductivity (EC) in a water/saline solution system at the time of four days (96 hours) after the start of measurement is 4.5 dS/m or less, when the water and saline solution in the system are brought into contact through the film so that the water and saline solution face each other through the film.

15 3. A plant-cultivating device according to claim 1 or 2, wherein the film is one showing a difference in concentration (Brix%) of a water/glucose solution system at the time of three days (72 hours) after the start of measurement is 4 or less, when the water and a glucose solution in the system are brought into contact through the film so that the water and glucose solution face each other through the film.

20 4. A plant-cultivating device according to any of claims 1-3, wherein the film is one showing a peeling strength of 10 g or more with respect to the root of the plant body at the time of day 35 after the start of the cultivation of disposing the plant body at the inside (the opposite of the film side facing water) of the film.

25 5. A plant-cultivating device according to any of claims 1-4, wherein the film has a water impermeability of 10 cm or more in terms of water pressure resistance.

30 6. A plant-film integrate, comprising at least a plant body and a film which has substantially been integrated with the root of the plant body.

35 7. A plant-cultivating method, comprising:
 providing a plant-cultivating device having a shape capable of receiving a plant body to be

cultivated, and comprising, as at least a portion
thereof, a film capable of being substantially integrated
with the root of the plant body; disposing the plant body
in the device; and cultivating the plant body while
5 allowing water containing a fertilizer component or a
biologically active substance to be contacted with the
plant body through at least the film.

8. A plant-cultivating method according to claim
7, wherein a plant-retaining support is disposed between
10 the plant body and the film.